

**REMARKS**

**I. Status of Claims**

Claims 19, 21, 32 and 35 are pending in the application.

Claim 35 is amended to include “and” between the fourth and fifth conjugates recited therein. Claim 35 is also amended to clarify that the gamma-emitting or positron-emitting moiety is iodine, i.e., the presently claimed conjugates are iodo-compounds.

No new matter is added, and the amendments are only made as a matter of form. Accordingly, Applicants respectfully request entry and consideration of the Amendment after a final Office Action.

**II. Response to Claim Rejections Under 35 U.S.C. § 112, first paragraph**

A. *Claims 35 was rejected under 35 U.S.C. § 112, first paragraph, as allegedly failing to comply with the written description requirement.*

The Examiner stated that the specification does not disclose the conjugates recited in new Claim 35.

Applicants respectfully traverse, at least for the following reasons.

As Applicants pointed out in the previous response filed January 12, 2011, the cell targeting conjugates of Claim 35 are disclosed at Fig. 17, and described at page 11, lines 11-13 and page 25, lines 19-31. Fig. 17 specifically lists the five structural formulae of Claim 35. Page 11, lines 11-13 specify that Fig. 17 shows exemplary general structures of compounds of the present application that are useful for imaging purposes, and where the active moiety “I” is distanced from the DNA minor groove binding portion of the compound. Moreover, the paragraph bridging pages 25-26 (including lines 19-31 at page 25) further describes the use of

the conjugate with a DNA ligand and an active moiety for imaging purposes, and the necessity for the distance between the DNA ligand and the active moiety.

Applicants respectfully submit that the above descriptions in the specification provide adequate written description for the subject matter recited in Claim 35. Accordingly, Applicants respectfully request reconsideration and withdrawal of the § 112, first paragraph rejection of Claim 35.

**B.** *Claims 19, 21, 32, and 35 were rejected under 35 U.S.C. § 112, first paragraph, as allegedly failing to comply with the written description requirement.*

The Examiner stated that the present application does not sufficiently describe the invention as it relates to (1) the cell conjugates set forth in Claim 35, and (2) the tautomers of the cell conjugates encompassed by the presently claimed invention (i.e., Claim 19).

Applicants respectfully traverse, at least for the following reasons.

As to point (1), the present claims are directed to cell targeting conjugates, which are explicitly disclosed in the specification. As discussed above in Sect. II (A), the compounds of Claims 35 are expressly shown in Fig. 17. Moreover, the preparation of the cell conjugates are also described in the working Examples of the specification. Additionally, working Examples 14-16 at pages 59 to 61 of the specification provide detailed examples of the preparation of conjugates according to the presently claimed invention. The above examples, along with the more general disclosures provided regarding conjugation techniques at pages 24 to 26 of the specification would enable a person skilled in the art to produce the presently claimed conjugates.

As to point (2), tautomers are well-known in the art, and are also defined in the specification. At page 20, lines 9-12, the term “tautomer” is defined to include

compounds of formula (I) which are capable of existing in a state of equilibrium between two isomeric forms. Such compounds may differ in the bond connecting two atoms or groups and the position of these atoms or groups in the compound.

Therefore, Applicants respectfully submit that the tautomers of the presently claimed invention are sufficiently defined in the specification such that a person of ordinary skill in the art would recognize that Applicants were in possession of the claimed invention.

In view of the above, Applicants respectfully request reconsideration and withdrawal of the § 112, first paragraph rejection of Claims 19, 21, 32 and 35.

**III. Response to Claim Rejections Under 35 U.S.C. § 112, second paragraph**

Claims 19, 21, 32, and 35 were rejected under 35 U.S.C. § 112, second paragraph, as allegedly being indefinite for the following reasons.

- A. *Claims 19, 21, 32, and 35:* The Examiner stated that the claims as written are ambiguous because it is unclear what tautomers of the various cell conjugates Applicants are claiming are compatible with the instant invention.

Applicants respectfully traverse.

As discussed in above in Sect. II (B) above, the tautomers of the presently claimed invention are sufficiently defined in the specification. Since the claims are read in light of the specification, the metes and bounds of the present claims are clearly defined, and the claims are definite.

Accordingly, Applicants respectfully request reconsideration and withdrawal of this ground of the § 112, second paragraph rejection of Claims 19, 21, 32 and 35.

- B.** *Claim 35, line 7:* The Examiner requested clarification on whether Applicants' intend to insert an "or" before the structure at line 7.

Claim 35 is amended to insert "and" between the second to last and last structures recited in the claim, rendering moot the § 112, second paragraph rejection of the claim.

Accordingly, Applicants respectfully request reconsideration and withdrawal of this ground of the § 112, second paragraph rejection of Claim 35.

- C.** *Claim 35, line 9:* The Examiner believes that the phrase "I represents the gamma-emitting or positron-emitting moiety" is ambiguous because it is unclear if "I" in the structure is iodine or if it is a variable that Applicants have previously defined as a gamma or positron emitting moiety.

To expedite and advance prosecution, Claim 35 is amended to replace the phrase "wherein I represents the gamma-emitting or positron-emitting moiety" with the phrase "wherein the gamma-emitting or positron-emitting moiety is iodine (I)" because the presently claimed conjugates are iodo-compounds. The amendment to Claim 35 renders moot this ground of the § 112, second paragraph rejection of Claim 35.

Accordingly, Applicants respectfully request reconsideration and withdrawal of the rejection.

### **Conclusion**

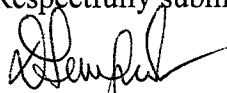
In view of the above, reconsideration and allowance of this application are now believed to be in order, and such actions are hereby solicited. If any points remain in issue which the Examiner feels may be best resolved through a personal or telephone interview, the Examiner is kindly requested to contact the undersigned at the telephone number listed below.

AMENDMENT UNDER 37 C.F.R. § 1.116  
Appln. No.: 10/590,784

Attorney Docket No.: Q96728

The USPTO is directed and authorized to charge all required fees, except for the Issue Fee and the Publication Fee, to Deposit Account No. 19-4880. Please also credit any overpayments to said Deposit Account.

Respectfully submitted,



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